

US DOL SPONSORED TAACCCT GRANT: TC23767 PRIMARY DEVELOPER: Jim Blair – Henry Ford College

# **Basic Electricity – Unit Six: Other Basic Circuit Fundamentals**

Study Guide

In order to successfully complete this unit, complete the following tasks:

- 1. Review the course structure.
- Watch: <u>https://www.youtube.com/watch?v=MImq6R6QCgg</u>
  Title: Potentiometers, Rheostats and Potential Dividers A Level Physics
  Author: DrPhysicsA
- 3. Read "The Potentiometer Handbook" found at: <u>https://www.bourns.com/pdfs/OnlinePotentiometerHandbook.pdf</u>
- 4. Read "The Wheatstone bridge" found at: <u>http://www.electronics-tutorials.ws/blog/wheatstone-bridge.html</u>
- Watch: <u>https://www.youtube.com/watch?v=wPFrnhSUGYY</u> Title: Basic Electronic Components - The Thermistor Author: Jacob Dykstra
- 6. Read "Current Divider Circuits" found at: <u>http://www.allaboutcircuits.com/textbook/direct-current/chpt-6/current-divider-circuits</u>
- 7. Complete the Lab #1 on Other Basic Circuit Fundamentals (PDF) and submit it to the lab instructor/course instructor.
- 8. Solve Homework Problem #1 on Parallel Circuits and submit to the lab instructor/course instructor.
- 9. Complete Lab #2 (PDF) on Parallel Circuits and Submit to the lab instructor/course instructor.
- 10. Complete Lab #3 on Parallel Circuits and submit to the lab instructor/course instructor.
- 11. Solve Homework Problem #2 on Parallel Circuits and submit to the lab instructor/course instructor
- 12. Solve Homework Problem #3 on Parallel Circuits and submit to the lab instructor/course instructor.
- 13. Solve Homework Problem #4 on Parallel Circuits and submit to the lab instructor/course instructor.
- 14. Solve Homework Problem #5 on Parallel Circuits and submit to the lab instructor/course instructor.
- 15. Complete Lab #4 (PDF) on Combination Circuits and submit to the lab instructor/course instructor.
- 16. Complete the final in-lab Test on Parallel Circuits and submit it to the lab instructor/course instructor.





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PAGE	2 of 2

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